Claims:

1. (Currently amended) A method for the presentation of information concerning variations of the arterial filling with blood of organs of living beings on a display unit, the method comprising:

determining perfusion index data for presentation using an algorithm from measured values produced by a non-invasive photometric measuring process for determining the arterial oxygen saturation of the blood;

defining a first perfusion index as a reference value selected from perfusion index values determined during the photometric measuring process;

determining subsequent perfusion indices as relative deviations with respect to the reference value;

displaying the reference value on the display unit; and

presenting said relative deviations as information concerning the variations of the perfusion on the display unit using first and second parallel bar elements for the presentation of the reference value and the relative deviations, respectively, where a length of the first parallel bar element represents the reference value and a variable length of the second parallel bar element represents the relative deviations.

2. (Previously presented) A method as claimed in claim 1, wherein the defining of the reference value takes place automatically at the beginning of the photometric measuring process.

3. (Canceled)

- 4. (Previously presented) A method as claimed in claim 1, wherein the reference value is stored on a memory chip.
- 5. (Previously presented) A method as claimed in claim 1, wherein the reference value as well as the subsequent perfusion indices are scaled by a factor.

- 6. (Previously presented) A method as claimed in claim 5, wherein the factor is adjustable.
- 7. (Currently amended) A method as claimed in claim 1, wherein the relative deviation of the perfusion is <u>further</u> presented in numerical form and the reference value is displayed in numerical form.

8-11. (Canceled)

- 12. (Currently amended) A method as claimed in elaim-8 claim 1, wherein the display is formed as a multidimensional type in conjunction with other physiological variables.
- 13. (Previously presented) A method as claimed in claim 1, wherein an upper alarm limit and a lower alarm limit are provided.
- 14. (Previously presented) A method as claimed in claim 13, wherein the alarm limit is adjustable.
- 15. (Previously presented) A method as claimed in claim 13, wherein an alarm signal is triggered when the alarm limit is exceeded.

16-21. (Cancelled)

22. (Currently amended) A device comprising:

a pulsoximeter for determining arterial O₂ saturation and for providing perfusion data; and

a display unit configured to display:

a first <u>parallel</u> <u>bar</u> graphical element <u>whose length</u> is indicative of a reference perfusion index value derived from the provided perfusion data at a reference time, and

a second <u>parallel bar</u> graphical element <u>whose length is</u> indicative of a subsequent perfusion index value derived from the provided perfusion data at a subsequent time, <u>and</u>

 $\frac{\text{arterial } O_2 \text{ saturation determined by the}}{\text{pulsoximeter.}}$

wherein the display unit displays the first and second <u>parallel bar</u> graphical elements together to provide a visual indication of a relative deviation of the subsequent perfusion index value from the reference perfusion index value.

23-26. (Canceled)